Numbers Fewer Smokers

2005 Update

To give a sense of the magnitude of persons affected by small changes in the prevalence of tobacco use, the Department of Health provides information about the estimated number of current smokers, for adults (people eighteen or older) and for youth (children ages ten to seventeen) separately.

These numbers are estimates, and not intended to be a measure of success for the program. The success of the program is determined by significant changes in behavior among the population, not by the numbers of people in that population who change behavior.

For both adults and youth the estimates are “standardized” to the year 2000 populations. This is done because population size is increasing. If the year-specific population sizes were used to calculate the year-specific estimates, the picture of how smoking has decreased in the general population would be diminished (and eventually potentially washed away) by that overall population growth.

The year 2000 was chosen for standardization because it was a census year, and information about the population sizes for that specific year are likely to be more accurate than other (inter-censal) years.

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Estimated numbers of YOUTH smokers

Year	Actual population (10-17)	Mean smoking prevalence (avg for all grades)*	Number of smokers
1998/1999*	686179	20.0%	137,236
2000	693,628	16.0%	110,980
2002	708,035	12.3%	87,088
2004	710,432	10.6%	75,306

Number fewer youth smokers (actual 1999-2002) = 50,147
Number fewer youth smokers (actual 1999-2004) = 61,930

Year	Adjusted to 2000 population (10-17)	Mean smoking prevalence (avg for all grades) *	Number of smokers
1998/1999*	693,628	20.0%	138,726
2000	693,628	16.0%	110,980
2002	693,628	12.3%	85,316
2004	693,628	10.6	73,525

Number fewer youth smokers (1999-2002, adjusted to population 2000) = 53,409
Number fewer youth smokers (1999-2004, adjusted to population 2000) = 65,201

For youth, in comparison to adults, population size is not changing as rapidly which makes population standardization not as important. However, to be consistent with methods used for calculation and reporting of population size changes for adults, we will use the same methodology of standardization to the 2000 Census population.

Thus, the number fewer youth in Washington from the time prior to the program launch (1998/1999) to the present (2004) can be described as 65,000 (rounded to the nearest thousand). A suggested statement for discussing this change is:

> "If smoking levels had remained the same as prior to the program, there would be about 65,000 more youth smokers today in Washington. (adjusted for population growth)"

These numbers are likely an underestimate of the actual changes in population size youth smokers. They are calculated using prevalence estimates from the school-based "Healthy Youth Survey" (2002 and 2004), "Washington State Survey of Adolescent Health Behaviors" (WSSAHB 1998 and 2000), and the "Washington State Youth Risk Behavior Survey" (YRBS 1999). These surveys are conducted among youth enrolled in public schools, and therefore exclude youth who are not attending school, among whom there is likely to be a high rate of smoking. Also, there may be some youth under age ten who take up smoking, although this number is expected to be quite small. Thus, the estimated overall prevalences are likely to be a bit low.

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* for 1999 overall prevalence estimation, because the survey was not conducted among 6th and 8th graders, we used rates for these grades from the previous year's survey (1998).

Estimated numbers of ADULT smokers

Year	Actual adult population	Smoking prevalence[+]	Number of smokers
1999	4,311,892	22.4%	965,864
2000	4,380,278	--	--
2002	4,519,053	20.5%	926,406
2003	4,578,098	19.8%	906,463

Number fewer adult smokers (actual 1999-2003) = 59,401

Year	Adjusted to 2000 adult population	Smoking prevalence[+]	Number of smokers
1999	4,380,278	22.4%	981,182
2002	4,380,278	20.5%	897,957
2003	4,380,278	19.8%	867,295

Number fewer adult smokers (adjusted to population 2000) = 113,887
For reporting purposes, this figure was rounded to 115,000.

For adults, population size is growing fairly rapidly. Standardization to the 2000 Census population provides a way of quantifying the changes in numbers of people (to communicate the point that "a lot of people have been affected" which might be lost when talking about a small prevalence change of 2.6%).

Thus, the number of fewer adult smokers in Washington from the time prior to the program launch (1999) to the present (2003) can be described as 115,000 (rounded for reporting purposes). A suggested statement for discussing this change is:

> "If smoking levels had remained the same as prior to the program, there would be about 115,000 more adult smokers today in Washington. (adjusted for population growth)"

[+] Measured using the state Behavioral Risk Factor Surveillance System (BRFSS). For 2003, the prevalence is among English Speaking respondents only to be comparable with baseline in 1999.

Estimated numbers of YOUTH WHO START SMOKING

To most simply calculate the number of youth who start smoking every day in Washington, we make the following assumptions:

- The number of youth who currently smoke stays constant for any short period of time.
- Given the previous assumption, the number of youth who start smoking each day would be equal to the number of youth (under age 18)

In 2004, about 19.7% of 12th graders reported currently smoking as part of the Washington State Healthy Youth Survey. The Washington State Office of Finance and Management (OFM) projects the 2004 population size for 17 year olds as 86,506. Therefore about 19.7% x 86,506=17,042 youth of all ages must take up smoking to replace the currently smoking 17-year old youth who become adults in one year (the time it takes for all the 17 year olds who currently smoke to become adults – or 18 year olds).

This number translates into about 45 per day (17,042/365 days).

This is an underestimate because some youth take up smoking and quit between survey administrations, so they would not be captured in the information.

The further away from 2004, and the more likely that the prevalence of smoking is changing among youth (increasing or decreasing), the less accurate this estimate will become.

In calculating this estimate, we assume that it will be used for the purpose of helping people in Washington to understand that a large number of youth are smoking. This estimate should not be used as part of evaluating the performance of the Washington State Tobacco Prevention and Control Program.

Given the above assumptions and caveats, we estimate that about 45 kids still start smoking every day in Washington.